

isc N-Channel MOSFET Transistor

2SK530

DESCRIPTION

- Drain Current $-I_D=5A @ T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}=400V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- Designed especially for high voltage,high speed applications, such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ C$)

SYMBOL	ARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	400	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $TC=25^\circ C$	5	A
P_{tot}	Total Dissipation@ $TC=25^\circ C$	40	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

PIN 1.Gate
2.Drain
3.Source

TO-220Pa package

DIM	mm	
	MIN	MAX
A	16.85	17.15
B	9.90	10.10
C	4.35	4.65
D	0.75	0.80
F	3.20	3.40
G	6.90	7.10
H	5.15	5.45
J	0.45	0.75
K	13.35	13.65
L	1.10	1.30
N	4.98	5.18
Q	4.85	5.15
R	2.95	3.25
S	2.70	2.90
U	1.75	2.05
V	1.30	1.50

isc N-Channel Mosfet Transistor**2SK530****• ELECTRICAL CHARACTERISTICS (T_C=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 10mA	400			V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} = 10V; I _D = 1mA	1.5		3.5	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D =3A		1.0	1.4	Ω
V _{DS(ON)}	Drain-Source Saturation Voltage	I _F = 8A; V _{GS} =10V		10	18	V
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} =400V; V _{GS} = 0			1	mA
t _r	Rise time	V _{GS} =10V; I _D =2A; R _L =50 Ω		25	50	ns
t _{on}	Turn-on time			40	80	ns
t _f	Fall time			30	70	ns
t _{off}	Turn-off time			140	280	ns